

# PredicineRNA™

## 88-Gene cfRNA Liquid Biopsy Panel

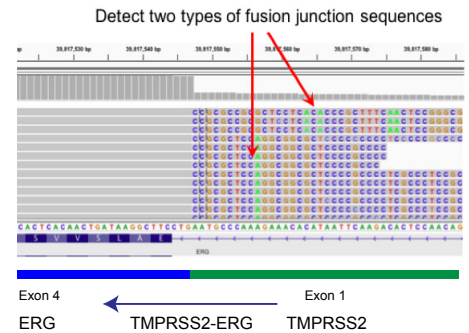
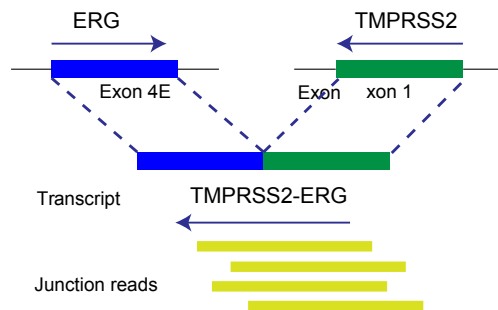
cfRNA panel for detection of RNA-level fusions and splicing variants

# 88

Fusion genes and splicing variants interrogated

# 53kb

Broad genome coverage



## Methods and Reporting

- Identifies RNA-based fusions and splicing variants
- Detects known and novel fusions
- A complementary approach to DNA fusion gene detection
- Uses a proprietary hybrid capture-based NGS methodology combined with in-house proprietary computational algorithms that enable accurate and sensitive detection of cancer variants
- Test results are provided in a report with clinically relevant genomic findings listed
- Research Use Only (RUO)

## Workflow

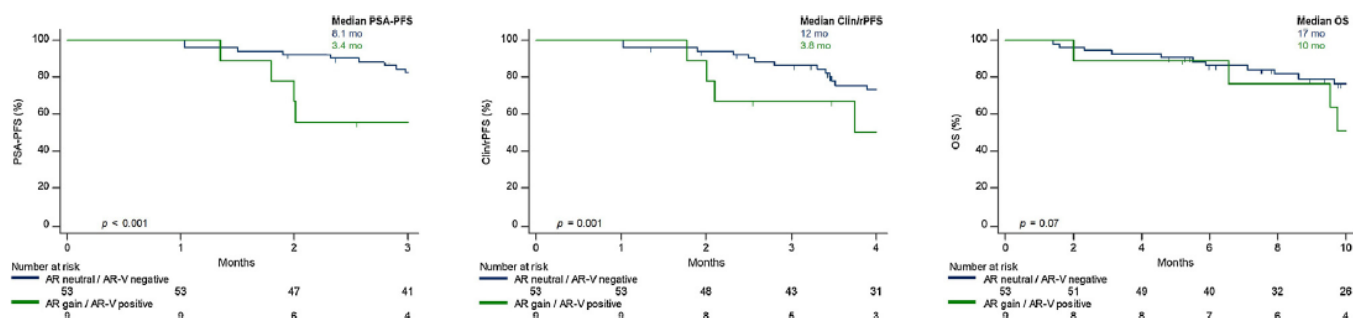


## Current Gene List & Performance Specification

ABL1	AKT1	ALK	AMACR	ARHGAP26	AR-Vs	AXL	BAIAP2L1	BCL2	BCL6
BRAF	CCND1	CREB3L2	CREBBP	CTNNB1	DDIT3	DEK	DUSP22	EGFR	ELK4
EPOR	ERBB2 (HER2)	ERG	ESR1	ESRRA	EWSR1	FGFR1	FGFR2	FGFR3	FOXO1
GLI1	GLIS2	KLF2	KMT2A (MLL)	LPP	MALT1	MAML2	MAST2	MET	MKL1
MLF1	MYB	MYC	MYH11	NCOA2	NF1	NFIB	NFKB2	NOTCH2	NR4A3
NRG1	NTRK1	NTRK2	NTRK3	NUP214	P2RY8	PAX3	PAX5	PAX8	PBX1
PDCD1LG2(PD-L2)	PDGFB	PDGFRA	PDGFRB	PKN1	PLAG1	PPARG	PRKACA	PRKCA	RAF1
RARA	RELA	RET	ROS1	RSP02	RUNX1	RUNX1T1	SS18	SSX1	SSX2
STAT6	STIL	SUZ12	TAL1	TFE3	TFEB	TP63	WDFY2		

PERFORMANCE SPECIFICATIONS	
Specimen Type and Requirement	4ml plasma 10ml whole blood
Turnaround Time	10 days
Regions Analyzed	88 genes
Panel Size	53 kb
Sequencing	Illumina NGS

## Results



**Fig. 3 – Kaplan-Meier analysis of (A) PSA-PFS, (B) clinical or radiographic PFS, and (C) overall survival, according to concurrent expression of both an AR-V and an AR copy number gain. Six patients were excluded from analysis due to insufficient information on AR-V expression. AR= androgen receptor; AR-V=AR splice variant; Clin/rPFS=clinical/radiographic progression-free survival; OS= overall survival; PFS= progression-free survival; PSA=prostate-specific antigen.**

## Conclusions

- The data suggest that combined cfDNA and cfRNA sequencing may have high clinical value in metastatic castration-resistant prostate cancer (mCRPC).
- In a cohort of 7 mCRPC patients commencing contemporaneous systemic therapy, the PredicineRNA™ Assay was capable of simultaneously detecting both cfDNA and cfRNA aberrations using liquid biopsy from a single 10 mL blood tube.
- In two independent cohorts, the authors identified a novel poor prognosis subgroup harbouring concurrent AR gain and androgen receptor (AR) gain and expression of the AR-V splice variant.

Fettke, et al. Combined Cell-free DNA and RNA Profiling of the Androgen Receptor: Clinical Utility of a Novel Multianalyte Liquid Biopsy Assay for Metastatic Prostate Cancer. *European Urology*. 2020; 78(2): 173-180.